The Times and Register.

VOL. XXX. No. 4. PHILADELPHIA, JULY 27, 1895. WHOLE No. 881.

Original.

REPORT OF A CASE OF OSTEO-LIPO-CHONDROMA OF THE UPPER END OF THE HUMERUS—RESECTION OF HUMERUS—EXHIBITION OF PATIENT.

BY THOMAS R. NEILSON, M. D.
Surgeon to the Episcopal Hospital and to St. Christopher's Hospital for Children.

The case which I desire to report to the Academy is that of a young man who suffered from a tumor involving the head and upper end of the shaft of the right humerus. I saw him first in the early part of last February. His history was as follows: J. T. P., 21 years of age, worked on a farm until two years ago, when he learned the trade of electrical construction, in which his work has been light. Family history, good; no history of tumors among relatives. In June, 1893, his attention was called by a fellow-workman, who saw him stripped, to an enlargement of the humerus, the size of a pigeon's egg. One year later it had slowly grown to twice that size. Afterward it grew more rapidly, and in November, 1894, it began to cause inconvenience by its size—limiting the motions of the joint, and giving rise to a sensation of numbness occupying the back of the arms as far down as the elbow; there was also loss of sensation in the fingers, and he noticed some diminution of power in the hand, especially in using the hammer. At no time was there any pain in the growth. There was no history of injury to the shoulder.

Upon examination I found the upper end of the humerus markedly enlarged, the growth being hard and immovable, and having an irregular surface, the larger portion of it projecting inward toward the axilla, and preventing complete adduction of the arms. From the history, the slowness of the growth, the absence of pain, the irregularity of the surface, and the uniform density of the mass, I believed the tumor to be an enchondroma, and felt that resection was to be advised. In this opinion Professor Ashhurst, who kindly examined the patient for me, concurred.

The patient was admitted to the Episcopal Hospital on February 7, 1895. The measurements of the right shoulder as compared with the opposite side were as follows: Around the most prominent part of the head of the bone, just below the acromion (arm adducted), right, 18 inches; left, 15 inches; two inches below the acromion (arm abducted) the circumference of the right shoulder was 14 3-4 inches, and of the left 12 inches.

Operation—On February 13, with the assistance of my colleagues, Drs. Harte and H. C. Deaver, I resected the growth by the deltoid flap operation. Starting my incision at the tip of the coracoid process, I carried it downward along the groove between the deltoid and pectoralis major, and then across the arm to the outer side at the level of the insertion of the deltoid. I next dissected back the skin and superficial fascia about an inch for the whole extent of the incision, and then divided the deltoid transversely about two inches above its insertion. The flap being turned back, the tendon of the long head of the biceps was freed from its groove and held to one side, the capsule of the joint opened, the insertions of the supra- and infra-spinatus and teres minor severed, and the attachments of the sub-scapularis divided. The growth was so large that it was

found impossible to complete disarticulation until the attachments of the coraco-brachialis and of the pectoralis major were also divided. This being accomplished, I sawed through the humerus just above the insertion of the deltoid. After making the section I noticed a suspicious spot of degenerated tissue remaining, and, pushing back the periosteum with the insertion of the deltoid, I cut off another inch of the bone.

Throughout the operation there was no arterial hemorrhage of moment, only a few muscular branches requiring ligature; but the cephalic vein was, unfortunately, slightly torn at the beginning of the operation, while pushing it aside in the groove between the deltoid and the pectoralis major, and again later when delivering the growth. I tied it below the tear, and again some distance further up, and resected the intervening segment—about five inches in length.

This being done, the wound was flushed with normal salt solution, and the deltoid united with several quilted sutures of kangaroo-tendon. A large rubber drainage-tube was inserted, and the wound closed with silk sutures. A bichloride-gauze dressing was applied and the arm bandaged to the side, a large axillary pad supporting it.

The patient did remarkably well and the wound healed kindly.

There was no noteworthy occurrence until the 18th day, when it was found that, at a point about the centre of the wound, just over the anterior axillary fold, the union had broken down, and there was a slight purulent discharge. The cause of this was found to be one of the kangaroo-tendon sutures, which was working its way out. Four days later another of these sutures was discharged from the little sinus, and again in five days a third one. The sinus then healed firmly.

On March 30 the patient was discharged from the hospital. At that time the contraction of the deltoid showed that it had united firmly, in spite of the fact that three of the kangaroo sutures had cut their way out, owing to imperfect sterilization.

The patient, as you will observe, has now very good motion of the arm, and he tells me that he has returned to his former work at electrical construction. The specimen, which I present for your inspection, shows the tumor to be nearly twice the size of the fist, and to have grown largely toward the inner aspect of the bone. A section of the growth was examined by Dr. Joseph McFarland, pathologist to the hospital, who reported the microscopical diagnosis to be osteo-lipo-chondroma

---

REMARKS UPON TREPHINING THE CRANIUM.

BY JOHN ASHHURST, JR., M. D.,
Barton Professor of Surgery and Professor of Clinical Surgery in the University of Pennsylvania, Surgeon to the Pennsylvania Hospital, Etc.

I find that I have performed the operation of trephining the skull 41 times, not including those cases in which I have merely opened the frontal sinuses, nor those in which I have removed bone-fragments without using the trephine. Of these 41 cases 20 ended in recovery and 21 in death, showing a mortality of little more than 50 per cent. In many instances I have refrained from interference when other surgeons would have operated, so that my cases have been of an unfavorable type, and the mortality has no doubt been higher than if I had operated more indiscriminately.

The details of these cases are as follows: Twenty-four were primary operations for compound fracture, with 11 recoveries and 13 deaths; two were operations during the intermediate period, both successful; and three were secondary operations, with one recovery and two deaths, both in cases of abscess.

As far as it goes this analysis confirms what has so often been pointed out, that there is not as much urgency in operating upon compound fractures of the skull as there is in compound fractures of the extremities In the latter the sooner the operation is done, if the patient is able to bear it, the better. This has long been the rule in military sur-

gery, when amputation is required, and some years ago I collected extensive statistics from civil practice which showed that the same rule of procedure applied there. But this is not so in compound fractures of the skull, and the proportion of recoveries is larger in delayed cases than when the operation is done immediately, as is well shown by Bluhm's statistics. At the same time, in a bad case, where an operation is evidently necessary, I do not advise delay; but early trephining is not so imperative as in early amputation for compound fractures of the long bones. Trephining for suppuration, occurring as the result of injury, is usually fatal.

In three cases I have operated for syphilitic disease, with two deaths and one recovery. In the latter case, beside evidence of syphilitic brain disease, there were painful nodes on the skull, and I operated by dividing the nodes with a Hey's saw, and then made a single opening with the trephine, so as to relieve the intracranial tension. The patient was much benefited for a time, and left the hospital relieved though not cured. The fatal cases were in patients suffering from syphilis of long standing, with necrosis and intracranial suppuration.

I have been induced to trephine in three cases of epilepsy, all the patients recovering from the operation. One, an epileptic with suicidal tendencies, came under my care at the University Hospital in October, 1886. After the operation the patient was much benefited as long as he remained under observation. In the other two there was no evident improvement, though both did well as regarded the operation. In a case of melancholia, following an old fracture of the skull, trephining gave no relief, and of two cases in which I have operated for convulsions, etc., following old injury, one terminated fatally, while no permanent gain resulted in the other.

I have operated unsuccessfully upon three patients for the cerebral complications resulting from disease of the middle ear. Statistics show that many lives have been saved by trephining under these circumstances, but in my own cases, though the abscesses have been reached and evacuated, the patients have died.

Although I have thus operated in 21 fatal cases by trephining, in only one case did the operation seem to have been responsible for the patient's death. This case was that of a child with depressed fracture over the lateral sinus. On removing the depressed bone profuse hemorrhage occurred, and the patient died in consequence. I had not then learned the futility of attempting to check bleeding from the brain sinuses, except by prompt plugging. I have had four cases since in which the longitudinal sinus was opened, and in two of them the patient recovered. In a third, bleeding was readily controlled by pressure, but ultimately death followed; while in the fourth a clot had formed in the sinus, giving time to apply a lateral suture to the divided vessel. This case was an interesting one; it was that of a boy who had been injured by a nitro-glycerin explosion, a piece of the metal being found lodged in the longitudinal sinus, causing a clot as mentioned.

As regards the locality of the injury, I find that of fractures involving the frontal bone, omitting those simply involving the frontal sinuses, there were five, with four recoveries and one death. These figures do not confirm the general impression that there is special danger in fractures of the frontal bone. Indeed, much more depends upon the amount of injury to the brain than upon the place of the fracture. In one case the indication for trephining was bleeding from the middle meningeal artery, and in that case the patient recovered. He was an athlete, who, while playing football, came into violent collision with another player, sustaining a fissured fracture of the parietal bone. He was stunned at the time, but soon recovered consciousness; in the course of half an hour, however, convulsions came on, followed by coma. He was brought to the hospital, and I applied the trephine, evacuating a considerable quantity of clot; the patient made an uninterrupted recovery.

REPORT OF A CASE OF RUPTURE OF THE URETHRA, ACCOMPANIED BY EXTENSIVE EXTRAVASATION OF URINE. SUCCESSFULLY TREATED BY PERINEAL SECTION AND RETROGRADE CATHETERIZATION.*

BY ORVILLE HORWITZ, B. S., M. D., PHILADELPHIA.

Retrograde catheterization was first performed by Verguin in 1757 by the introduction of a catheter into the urethra through a pre-existent fistula of the bladder. Sedillot, writing upon the subject, expresses a belief that a retrograde catheterization is the proper course to pursue in cases of impassable stricture, or rupture of the urethra, in which the posterior end of the urethra could not be found after making the incision in the perineum.

Retrograde catheterization is not of frequent necessity, but the successful termination of several operations of this kind that we have witnessed, and the experience that we have had with the case that is about to be reported, leads to the inference that the surgeon should not hesitate to resort to this procedure if inordinate difficulty is experienced in finding the distal end of the urethra.

The patient whose case we are about to recount, was brought to the Jefferson Hospital by Dr. Ivin A. Fries. Its history is briefly as follows:

The individual was a laborer, 36 years of age, married. While standing on a ladder he slipped and fell a distance of some ten feet, lighting astride a fence, and violently striking the perineum. He was picked up unconscious, which condition lasted a short time; when on regaining consciousness he found that his perineum, scrotum, and thighs were much swollen and discolored. Any attempt to void his urine was attended with great pain; at the same time he passed a large quantity of blood. An effort was made to pass a catheter without success, and he was advised to enter a hospital for operation. This he refused to do. The following morning the swelling was enormously increased, and had extended to the penis and abdomen. There was complete retention of urine, the bladder reaching to the region of the umbilicus. Frequent attempts were made to draw off the urine without success. Late in the afternoon the patient consented to an operation, and 48 hours after the receipt of the injury he was brought to the hospital. He was in a very perilous condition.

The modification of the Wheelhouse staff, devised by us, which has been fully described elsewhere, was passed as far as the membranous portion of the urethra, and although the urethral canal was very deeply seated, consequent on the perineum being enormously swollen, no difficulty was experienced in opening the passage.

The hemorrhage was very profuse; the bleeding coming from all portions of the wound. It was, however, controlled by means of hot water and the use of a number of hemostatic forceps, which were allowed to remain in position for two days. After the wound had been rendered dry, a persistent search was made for the distal end of the urethra, without success. As the patient was in a very critical condition, and as the operation had already been somewhat prolonged, it was decided that it would be safer to perform retrograde catheterization at once rather than to lose more time looking for the concealed end of the urethra.

Superpubic cystotomy was performed without difficulty; the bladder being distended to its utmost capacity. The first incision through the skin allowed the escape of a large quantity of urine which had extravasated through the ruptured urethra into the perineum. After penetrating the bladder and allowing the urine to escape, an attempt was made to pass a catheter into the vesical orifice of the urethra; the emptying of the viscus had allowed it to sink

*Read before the Academy of Surgery, May 6, 1895.

very deeply in the pelvis, and it was only through the aid of an assistant, who inserted a finger into the rectum and pushed the base of the bladder upward, that the urethral opening could be reached. A silver catheter was then inserted, carried through the prostatic urethra and for a short distance into the membranous portion of the canal, where its onward progress was arrested. On examination of the perineal wound it was found that the distal extremity was turned on itself, and had become wedged into the surrounding crushed tissues. This condition was undoubtedly brought about by the attempts made at catheterization before the operation.

The action of the catheter had forced the end of the canal tightly down into the surrounding structures, much as a ramrod presses down a load of shot into a gun-barrel. The condition of affairs was such as to render it absolutely certain that had not a retrograde catheterization been performed the end of the urethra would not have been discovered.

After opening the membranous portion of the urethra in the manner described, free incisions were made into the penis, scrotum, thighs and the gluteal region, permitting the escape of large quantities of urine which had extravasated into those structures.

When the operation was completed it was found that the bleeding from the perineal wound was not only very free, but that it was impossible to control it without packing the part very firmly with iodoform-gauze. This precluded the insertion of a catheter, so that a large size drainage-tube was placed in the bladder, through the suprapubic opening, and a few stitches inserted.

The shock to the patient was great, but he soon rallied; at the end of two weeks he was again etherized and the continuity of the urethra which had become blocked by the packing was established.

The opening of the urethra could not be found through the perineal wound. The superpubic incision was rapidly dilated, and, recollecting the difficulty experienced in reaching the urethral orifice of the bladder on the previous occasion, a rectal bag was inserted, and then filled with ten ounces of water, which lifted the base of the bladder up to within easy reach of the finger. On passing a silver catheter toward the membranous portion of the urethra through the urethral opening of the bladder, it was discovered that the part had become completely occluded by the deposit of granulation tissue, which accounted for it not having been discovered in the perineal wound. The urethra was liberated by a simple cut of the knife, when the end of the catheter protruded into the incision in the perineum.

The catheter was employed to guide a Teal gorget into the bladder, and after removing the catheter from the bladder a full sized silver instrument was passed from the meatus into the viscus; the gorget served to guide it into place.

The gorget being removed, the catheter was tied in position and allowed to remain in place until both the superpubic and perineal wounds had healed, which required about four weeks. At the end of seven weeks from the date of his admission the patient left the hospital perfectly cured.

A careful analysis of this case would seem to justify the following conclusions:

Where an impossible stricture is present, especially if we are warranted in suspecting the existence of diseased kidneys, or in cases of rupture of the urethra, with indications of perineal section, should there be any difficulty in finding the distal end of the urethra, rather than prolong the operation, it is safer to perform retrograde catheterization with as little delay as practicable.

In cases of retention of urine, where the bladder is distended and superpubic cystotomy becomes necessary, the operation is very simple and requires but a few minutes for its accomplishment, and little time need be lost in resorting to retrograde catheterization.

Should the bladder be emptied or contain but a small quantity of urine the procedure is more difficult and a

longer time is needed. The patient should be placed in the Trendelenburg's position. Great care is to be observed not to injure the peritoneum, which, in this condition, lies directly over the viscus; by taking the pubic bone as a guide and going directly downward the bladder can be easily found and the serous membrane covering it can readily be pushed out of the way by means of the forefinger or the Allis dry dissector.

When the urine has escaped from the bladder and it is desirable to pass a catheter through the vesical orifice of the urethra the operation is facilitated by first distending the rectum by means of the rectal bag.

External perineal urethotomy without a guide, when there is an impassable stricture, or a ruptured urethra, is far from a simple operation; a good, steady, strong light and infinite patience are needed to insure success.

Time is saved and the operation much simplified by using the modified perineal staff of Horwitz.

Much valuable time is often lost by the attempts of the operator to ligate bleeding vessels, which lie in the deeper-seated portions of the wound, imbedded in cicatricial tissue. In a number of the operations of the kind that we have recently performed no effort was made to ligate these deep vessels. Hemostatic forceps were applied and allowed to remain in situ for from 24 to 48 hours. By resorting to this method of procedure no difficulty was experienced and the operation was completed in one-half the time otherwise required. We have frequently allowed from six to eight forceps to remain in a wound at one time.

We cannot too strongly urge upon the profession that the cause of failure to give permanent relief in many cases of external urethrotomy is owing to the fact that many operators allow the catheter to be removed on the fourth or fifth day, so that by the time the individual is ready to leave the institution the urethra, which just after the operation would have tolerated a full-sized instrument, has contracted to such a degree that only a very small bougie can be introduced. inserted with difficulty, and giving rise to a great deal of pain. After leaving the hospital the patient usually neglects to have an instrument regularly passed, and in the course of 12 months the stricture has contracted to such a degree that more frequently than otherwise the operation has to be repeated.

In the last 17 cases upon which we operated a full-sized catheter was inserted, tied in place and allowed to remain in position until the perineal wound was healed, usually requiring a period of from four to six weeks. The instrument must have attached to it a rubber tube, to be carried to a vessel underneath the bedstead, so that the patient and the bedclothes may be kept dry.

The catheter and urethra are to be daily irrigated with a warm solution of boric acid, in the proportion of ten grains of the acid to the ounce of water.

The number of cases that we have successfully treated by this method warrants the conclusion that the suggestion is valuable to the practitioner, and in commending it to the profession we are recommending a means of substituting for a diseased or contracted urethra one of full calibre; for, if the catheter be allowed to remain in position until the wound is closed, not only is the patient dry and comfortable, but a new urethra forms around the instrument, which when removed may be replaced by a full-sized bougie, which can be passed with ease. This the patient should continue to use, at first as frequently as twice a week, later on once a week, and finally once a month; to be continued during his lifetime, that is, if he wishes to avoid future trouble.

At the last annual commencement of Georgetown University, Washington, D. C., the degree of LL. D. was conferred on Dr. Ernest Laplace, professor of Surgery in the Medico-Chirurgical College of Philadelphia.

The Times and Register.

A Weekly Journal of Medicine and Surgery.

FRANK S. PARSONS, M. D.,
EDITOR AND MANAGER.

Subscription Price, - - - $1.00 Per Year.

Send money by bank check, postal, money or express order, payable to The Medical Publishing Co.

EDITORIAL STAFF.

W. H. PANCOAST, M. D., Philadelphia, Pa.
T. H. MANLEY, M. D., New York, N. Y.
E. W. BING, M. D., Chester, Pa.
S. H. MONELL, M. D., New York, N. Y.
J. R. CLAUSEN, A. M., M. D., Philadelphia, Pa.
AD. MEYER, M. D., Chicago, Ill.
LOUIS LEWIS, M. R. C. S., (Eng.) Phila., Pa.
J. A. TENNEY, M. D., Boston, Mass.
E. B. SANGREE, A. M., M. D., Philadelphia, Pa.
HENRY BURCHARD, M. D., D. D. S., Philadelphia, Pa.
J. A. KRUG, M. D., Philadelphia, Pa.

PUBLISHED BY

THE MEDICAL PUBLISHING CO.

Communications are invited from all parts of the world. Original articles are only accepted when sent solely to this Journal. Abstracts, clinical lectures, or memoranda, prescriptions, news and items of interest to the medical profession are earnestly solicited.

Address all communications to

Room 718, Betz Building.

Entered at the Philadelphia Post Office as second-class mail matter.

PHILADELPHIA, JULY 27, 1895.

LIMITATIONS OF SURGICAL OPERATIONS.

To the most casual observer, disguised as it may, it must occur that within the past 20 years practical surgery has made vast inroads on the domain of medicine.

Anesthetics and antiseptics, combined with the enormous strides of biological research and bacteriological studies, have made possible such sweeping advances along the whole line that in truth to-day many, nay, nearly all of those therapeutical principles so forcibly taught us in the near past must be regarded as positively obsolete and consigned to ob livion.

The above thoughts have been inspired by a masterly address recently delivered by Mr. Pierce Gould and published in our unrivaled contemporary, the London Lancet, entitled "Recent Evolution of Surgery."

While we cannot fully indorse all of the orator's views on this important topic, yet we must confess that nowhere have we met with so learned, logical and eloquent an expose of the subject with which he deals, or any which in its practical bearings approaches its great value.

There is great danger, however, in leaving the impression that there are no limitations to surgical operations in general other than those which are "anatomical" or "physiological."

It is true that we may with reasonable safety anticipate nature's more tedious means of draining a suppurating kidney, by way of the ureter or relieving pleuritic tensio n from effusion by absorption; but in the one, a nephrectomy except in the hands of a skilled operator and a proper environment, is always a perilous procedure, and at best entails the total sacrifice of what might have been preserved in part at least. And experience has repeatedly proven that pleurotomy, by the aspirator or pre-incision for anything except purulent collections, is attended with danger, and is often followed by prompt relapse of the serous accumulation taking on purulent changes. It is by no means generally decided among surgeons that an open incision into the tissues is either desirable or justifiable in fractures or dislocations except in such an emergency as threatens the vitality of the limb. In female pelvic diseases operative surgery has quite stamped out the older, more conservative medicinal treatment of them. Mechanical appliances have been so generally utilized in the treatment of diseases of the passages, as the nose, throat, rectum, urethra and vagina, that he who would keep apace with the times must of necessity take up surgery. Indeed, to meet the demands wrought by the late evolutions of surgery the number of operating surgeons must needs be greatly augmented, and every practitioner, in order to be fairly equipped to fulfill the requirements of the new regime, must give special attention to the surgical side of the healing art.

But let us not deceive ourselves with a notion that we have attained the millennium and that surgery must

be cultivated at the expense and exclusion of other studies, for without doubt the near future will bring a reaction and the conclusion will be pressed on us that the real acme of the healing art consists in preventive medicine, and addressing such medicaments to the disordered organism as will spare the necessity of mutilation of tissue; then the lesson will be forced on us that the safest and speediest route through which a lesion of a structure or any organ of a pathological origin is through the general system. This will demonstrate that, like every other precious boon, legitimate surgery has its limitations.

THE FOUR YEARS' COURSE.

At the San Francisco meeting of the American Medical Association the representatives of the American Medical Colleges voted to extend the course of study for medical students to four years; and, although all were not prepared to put this scheme into immediate force, nevertheless there was a general unanimity of opinion that in the near future all medical colleges in the United States would in the near future adopt this period as the minimum limit.

After a careful survey of the whole subject we believe that this is a move in the right direction. This is the usual limit required of an apprentice for a trade, and surely we can ask no less for one about to enter the ranks of a learned profession.

However, under the old regime the time is too long. Formerly, in many of our colleges, graduates were turned loose on the public to practice midwifery who never had witnessed a delivery; armed with formidable cases of instruments they went forth, ready to undertake the gravest description of surgical operations, when, perchance, they had never adjusted a fractured limb; with a pad of prescription blanks they were prepared to prescribe potent medicaments, the physical property of which they knew little, the chemical less, and the therapeutical perhaps nothing.

If it be the intention of faculties now to fully equip their graduates with a thorough theoretical and practical knowledge of their profession then indeed four years is none too long. But will they do it? Are they so equipped with ample clinical material, dispensary and hospital; have they all an ample corps of experienced clinical instructors to individually impart a practical knowledge to the advanced student?

If they have then the student can find profitable employment for all his leisure, and enter the world well prepared for the demands which will be made on him.

There is in all large cities an abundance of clinical material which is not properly utilized for teaching purposes, and never will be until the present system of medical education is changed. To remedy this it will be necessary to decentralize medical teaching, at least the clinical part of it, i. e., there should be a larger number of medical schools, each with a small class, in order that the student may come into nearer touch with his teacher and that he may be permitted in a fuller measure the advantages of a personal interest.

London has 13 medical schools with more than as many near hospitals, all being recognized by the council of the British Medical Association. There the student pays for his hospital course, and is free to select whichever he pleases. This plan, it would seem, might be extended to this country with advantage. Another reform imperatively called for is with regard to the payment of examination fees.

Why should a student be compelled to pay for a diploma which carries with it no legal value whatever?

And, after graduation, why should he be obliged to pay another examination fee before he be permitted to practice in his own or another State? If the State Board of Examiners' list is ample then to demand another fee beforehand strikes one as something of extortion, to say the least.

It is hoped now that the Colleges Association, having settled the time limit of study, will now apply themselves to another much-needed reform, viz.: to the abolition of State

examinations altogether and the organization of a national board of examiners with headquarters in Washington. Let this central body divide the whole country into four or six districts for division boards of examiners, and let it be understood that a certificate from any one of them will suffice for any State or territory in the country.

Surgery.

IN CHARGE OF
DR. T. H. MANLEY, New York.

PHYSIOLOGY AND MEDICATION OF THE THYROID.

By Dr. Morin, Revue de la Suisse, Rome.

Kocher, Bruns, Lanz, Nokine, Corubo, Revillod and other investigators have made many contradictory conclusions on the above subject, offering various ingenious hypotheses, without, however, being able to arrive at any definite conclusion on the physiology of the thyroid.

Anatomically the thyroid represents a gland composed of vesicles and secreting epithelia which contain a colloid substance. These vesicles are grouped in lobules, connective-tissue, blood vessels and lymphatics, large and numerous. There are various theories on the function of this body; one of Waldeyer, assigned to it the regularization of the cerebral circulation; the other, the dominant at the present time, assigns to this gland chemical functions in regulating the nutritive processes of economy. The ablation of it is followed by a peculiar cachexia—(myxedema, cachexia strumipriva).

But those symptoms are largely obviated by transplantation, or by an ample injection of the sheep's thyroid. In England, Ord, Harley and Hinton Fagge have observed non-surgical myxedema in cretins with atrophy, or entire absence of the gland. Bourneville and Bricon have noted the general absence of the gland in idiots. In Switzerland, on the contrary, we often note a hypertrophy of the gland in cretins. In Basedow's disease, one of its most prominent symptoms is an augmentation in volume of the thyroid, with a toxic state of the system, supposed by some authors to depend on an excessive secretion of the thyroid secretion. It is true that some believe that goitre is of a nervous origin, though Kocher and others deny this and allege that all the symptoms may and usually depend on an excessive secretion. This they have endeavored to prove by ligating the thyroid arteries, in which cases there always seemed an amelioration of the symptoms.

In my own two cases of Basedow's disease, however, marked improvement has succeeded alimentation with the sheep's thyroid. Threswksy has secured excellent results in some cases of Basedow's by administering the phosphate of soda. In one case, of such vast enlargement of the thyroid as to seriously threaten asphyxia, I advised the removal of the gland. This was refused. Then I employed the animal thyroid, hypodermically, with immediate relief of the symptoms and discontinuation of the growth. The action of the thyroid as a medicament is difficult to explain. On histological examination of a thyroid by Bruns and Langhams, the colloid material in the alveoli had been nearly entirely resorbed. This was after a year's course of treatment with the powdered gland. Notkine isolated a material from a diseased thyroid, which he designated "thyroproteide," which was decidedly toxic when injected into healthy animals.

The latest theory is that there is lodged in the epithelia of the thyroid an element which possesses a neutralizing action on certain lethal elements of the blood, carried there by the circulation for their destruction.

It has been noted that goitre is seldom associated with tuberculosis. In tubercular cases we will note a marked depression in the suprasternal fossa, apparently produced by a resorption of fat and an atrophy of the thyroid. Some have claimed that augmentation of the thyroid confers an immunity against tuberculosis.
(Revue de Therapeutique, Mai, '95.)

WHEN NOT TO TREPHINE FOR BRAIN TUMOR.

Lanpher gives the following rules:

1. It is useless to attempt operation in cases of undoubted brain tumor, when the growths are situated in the corpus callosum and the opticostriate region.

2 It is questionable whether or not operation is advisable in cases in which the usual symptoms of tumor are accompanied by disturbances of speech as the only "localizing" sign; the lesion will probably be found to be near the speech centre, as one would infer, but affecting the pons, medulla and the point of origin of the cranial nerves.

3. Nystagmus, either unilateral or double, permanent or temporary, complicated by paralysis of the motor nerves of one or both eyes, constitutes a barrier to operation as the trouble is unquestionably basal.

4. When nystagmus appears in the history of a case suspected to be tumor, associated with epileptic attacks or hemiplegia, the tumor may be upon the convexity just behind the fissure of Sylvius, but so often that is not the location that operation cannot be advised.—Northwestern Lancet.

RAILWAY ACCIDENTS AND MORTALITY.

From advance sheets of the "Abstract of Statistics of the Railways of the United States" for the year ended June 30, 1894, we learn that, "during the year 1823 railway employes were killed and 23,422 were injured, as compared with 2727 killed and 31,729 injured in 1893. This marked decrease in casualty is in part due to the decrease in the number of men employed, and the decrease in the volume of business handled. The decreased use of automatic appliances on railway equipment also may have rendered railway employment less dangerous and it may be that the grade of efficiency of employes has been raised.

"The number of passengers killed was 324, an increase of 25, and the number injured was 3304, a decrease of 195. Of the total number of fatal casualties to railway employes 251 were due to coupling and uncoupling cars, 439 to falling from trains and engines, 50 to overhead obstructions, 145 to collisions, 108 to derailments, and the balance to various other causes not easily classified. To show the ratio of casualty it may be stated that one employe was killed out of every 428 in service, and one injured out of every 33 employed. The trainmen perform the most dangerous service, one out of every 156 employed having been killed, and one out of every 12 having been injured.

"The ratio of casualty to passengers is in striking contrast to that of railway employes, one passenger having been killed out of each 1,912,618 carried, or for each 44,103,228 miles traveled, and one injured out of each 204,248 carried, or for each 4,709,771 miles traveled. A distribution of accidents to the territorial groups exhibits the diversity in the relative safety of railway employment and of railway travel in the different sections of the country."

PHILADELPHIA ACADEMY OF SURGERY.

Stated meeting, May 6, 1895. The president, Dr. Thomas G. Morton, in the chair.

Dr H. R. Wharton exhibited a case of incised

FRACTURE OF THE PATELLA IN WHICH WIRE WAS EMPLOYED.

Case I. The patient was a man about 30 years of age, who was brought into the Presbyterian Hospital June 9, 1894, with an incised wound of the knee. He said that while running a cleaver was thrown at him, which divided the patella almost transversely and laid open the joint. I saw him a few hours after the accident. I washed out the joint and put one or two heavy silver wire sutres through the fragments of the patella and sutred the capsule with a few stitches of catgut. He was kept five weeks in bed and returned to his work in thirteen weeks. He has regained perfect motion in the joint

and can flex and extend the leg and has no trouble in walking.

ALSO A PARTIAL AMPUTATION OF THE FOOT.

Case II. This case was injured by being run over by an engine. He was brought to the hospital in September, 1892, and I saw him a very short time afterwards. I found that he had a complete crush of the anterior part of one foot. I did a Syme amputation, and have not seen the man since the operation until this evening. He wears an artificial apparatus and walks very well and is employed on the railroad as a switch-tender. He has a very good bearing stump. There is a good elastic pad under the bone. The apparatus is simply a shoe with a brace, with which he gets along very well. He is actively employed and has to run to throw switches. In walking the weight of the body comes directly upon the heel.

ALSO A SIMULTANEOUS AMPUTATION OF THE LEG AND PARTIAL OF FOOT.

Case III. This case is a man who was thrown under a car and both wheels passed over his left foot and crushed the right leg and made a compound fracture of the left thigh, requiring removal of part of the shaft of the bone. I made an amputation of the leg at the upper third and a partial amputation of the other foot. In the foot I first thought I would do a Pirogoff, but decided to leave a portion of the astragalus in place, and to saw through the os calcis and bring its sawn surface in contact with the astragalus. It is seen that he has some motion in the ankle joint. He wears a peg-leg on one side and a short shoe on the other foot (the left). All the force of walking and weight of his body comes on the pad on the sole of his foot.

It seems as if there is an advantage in having some ankle-joint motion. If he should wear a properly made shoe it might be possible for him to have even better motion than he has. He can now walk between five and six miles every day without trouble.

I am glad to show these cases of partial amputation of the foot because there is a tendency at the present day to cry down this form of amputation. Many surgeons think that if part of the foot is destroyed it is better to make an amputation at what is called the point of election in the upper third of the leg. I have done many cases of this kind, but I have not seen a man who came into the hospital with a crush of the foot who would not prefer to have a partial amputation of the foot to an amputation of the leg above. I have seen several cases after Chopart's operation in which the results were very good, and the patients could walk or run without trouble.

THE SEARCH FOR A CANCER PARASITE.

The contribution which Dr. Braithwaite makes to our columns this week adds one more to the list of investigations in the quest for the parasite which is assumed to be at the root of the most formidable class of diseases to which mankind is subject. The labors of histologists have shown that in their structure malignant growths are capable of being classified under certain well-defined groups, according to the type of tissue or organ in which they arise. But histology is silent as to the initial stimulus which gives rise to these aberrant cell masses, as well as to the remarkable potentialities with which they seem to be endowed, so that recurrence in loco and general dissemination by the circulating fluids constitute a peculiar characteristic of malignancy. If in these respects malignant disease bears some resemblance to the character of tubercle, syphilis and like infective disorders, the analogy is purely superficial. For in every member of the class of infective disease the anatomical lesion is limited to the type of inflammatory or granulation tissue, and in none does it partake of the character of the more highly differentiated cells which are to be found in cancers and sarcomas. In the one case the influence of the microbe is confined to exciting changes,

which we term "inflammtaory," and the dissemination of the foci of disease is restricted to the territories in whch the parasite finds a lodgment. If, then, "cancer" (using the term in its widest sense) be also caused by a parasite it must of necessity be an organism which is endowed with quite special powers, for no histologist could declare that there was any real analogy between the processes of aberrant cell-growth in a malignant tumor and those of the small indifferent cells that constitute a tubercle or a gumma. Hence the failure of attempts to extract from malignant tumors by bacteriological methods any organisms of the bacterial class is hardly a matter for surprise. More hopeful of satisfactory result in this search would seem to have been the alleged discovery of cell parasites of protozoic nature; but here, unfortunately, so far the only test that could be applied has been the morphological one, and in spite of the numerous and painstaking researches and the beautiful demonstrations of intra-cellular bodies which have been made it behooves us to be extremely cautious in accepting these bodies as the parasites in question. Similar caution is also needed in regard to the fungi whch Dr. Braithwaite has found, and which apparently belong to the class of hyphomycetes. The spores of such fungi abound in atmospheric dust, the readiness with which they germinate is notorious, and although Dr. Braithwaite assures us that he has found their mycelial threads penetrating the substance of neoplasms (recent and preserved) there is room for skepticism when it is remembered that mould fungi are not infrequently found mingling with tissues on the microscopic slide. Apart from any fallacy of this kind, however, it is well to recall that similar fungi have been found in the body —e. g., in the lungs—and have been introduced into it experimentally, with the result that they have either been quite innocuous or have merely excited some local inflammation. If Dr. Braithwaite's inferences are correct, then the fungi he describes should show some peculiarities, according to the kind of malignant growth in which they occur, since it is not to be supposed that one and the same organism could excite the formation of a uterine myo-fibroma, an epithelioma and a sarcoma. It would be interesting to learn the opinion of a botanist upon the fungus, for if this discovery be confirmed—and the research, as compared with that for the protozoal parasite, is simplicity itself—quite a new light will have been thrown on the role of parasitic fungi.—Lancet.

APPENDICITIS.

1. The first inference from a general consideration of ileo-cecal troubles is that all collections of pus should be evacuated by free incision followed by gauze drainage. 2. Should the appendix be involved in the abscess and already in a necrosed state, it is fair to infer that the canal is closed so that there is no communication with the cecum, and hence excision is not requisite. 3. If, on the contrary, the appendix is found to be enlarged and indurated without perforation, it should be ligated and removed at once. 4. In suspected cases of appendicitis, without the signs of suppuration or the presence of a local swelling or induration, an exploratory operation by a transverse incision above Poupart's ligament, with separation of the muscular fibres, should be resorted to without delay. 5. With a clear diagnosis of appendicitis a longitudinal incision on the outer border of the rght rectus muscle, extending downward over the cecum, is best adapted to reach the appendix. 6. In all cases of recent occurrence in which suppuration has not appeared, but there exists an inflammatory process of the appendix, it should be removed.—Gaston.

The Woman's Medical College of Cincinnati, O., has united itself with the Laura Memorial Medical College. There did not seem to be room enough in Cincinnati for two medical colleges for women.

Medicine.

IN CHARGE OF
DR. E. W. BING, Chester, Pa.

COMPOSITION OF EXPIRED AIR AND ITS EFFECTS UPON ANIMAL LIFE.

1. The results obtained in this research indicate that in air expired by healthy mice, sparrows, rabbits, guinea pigs or men there is no peculiar organic matter which is poisonous to the animals mentioned (excluding man), or which tends to produce in these animals any special form of disease. The injurious effects observed of such air appeared to be due entirely to the diminution of oxygen or the increase of carbonic acid, or to a combination of these two factors. They also make it very improbable that the minute quantity of organic matter contained in the air expired from human lungs has any deleterious influence upon men who inhale it in crowded rooms, and hence it is probably unnecessary to take this factor into account in providing for the ventilation of such rooms.

2. In ordinary quiet respiration no bacteria, epithelial scales, or particles of dead tissue are contained in the expired air. In the act of coughing or sneezing, such organisms or particles may probably be thrown out.

3. The minute quantity of ammonia, or of combined nitrogen or other oxidizable matters found in the condensed moisture of human breath appears to be largely due to products of the decomposition of organic matter, which is constantly going on in the mouth and pharynx. This is shown by the effects of cleansing the mouth and teeth upon the amount of such matters in the condensed moisture of the breath, and also by the differences in this respect between the air exhaled through a tracheal fistula, and that expired in the usual way.

4. The air in an inhabited room, such as the hospital ward in which experiments were made, is contaminated from many sources besides the expired air of the occupants, and the most important of these contaminations are in the form of minute particles or dusts. The experiments on the air of the hospital ward, and with the moisture condensed therefrom, show that the greater part of the ammonia in the air was connected with dust particles which could be removed by a filter. They also showed that in this dust were micro organisms, including some of the bacteria which produce inflammation and suppuration, and it is probable that these were the only really dangerous elements in this air.

5. The experiments in which animals were compelled to breathe air vitiated by the products of either their own respiration or by those of other animals, or were injected with fluid condensed from expired air, gave results contrary to those reported by Hammond, by Brown Sequard and d'Arsonval, and by Merkel; but corresponding to those reported by Dastre and Loye, Russo Gillibert and Alessi, Hofmann Wellenhof, Rauer and other experimenters referred to in the preliminary historical sketch of this report, and make it improbable that there is any peculiar volatile poisonous matter in the air expired by healthy men and animals, other than carbonic acid. It must be borne in mind, however, that the results of such experiments upon animals as are referred to in this report may be applicable only in part to human beings. It does not necessarily follow that a man would not be injured by continuously living in an atmosphere containing two parts per 1000 of carbonic acid and other products of respiration, of cutaneous excretion, and of putrefactive decomposition of organic matters, because it is found that a mouse, a guinea pig, or a rabbit seems to suffer no ill effects from living under such conditions for several days, weeks or months, but it does follow that the evidence which has heretofore been supposed to demonstrate the evil effects of bad ventilation upon human health should be carefully scrutinized.

6. The effects of reduction of oxy-

gen and increase of carbonic acid, to a certain degree, appear to be the same in artifiicial mixtures of these gases as in air in which the change of proportion of these gases has been produced by respiration.

7. The effect of habit, which may enable an animal to live in an atmosphere in which by gradual change the proportion of oxygen has become so low and that of carbonic acid so high that a similar animal brought from fresh air into it dies almost instantly, has been observed before, but we are not aware that a continuance of this immunity produced by habit has been previously noted. The experiments reported in the appendix show that such an immunity may either exist normally or be produced in certain mice, but that these cases are very exceptional, and it is very desirable that a special research should be made to determine, if possible, the conditions upon which such a continuance of immunity depends.

8. An excessively high or low temperature has a decided effect upon the production of asphyxia by diminution of oxygen and increase of carbonic acid. At high temperatures the respiratory centres are affected when evaporation from the skin and mucous surfaces is checked by the air being saturated with moisture; at low temperatures the consumption of oxygen increases, and the demand for it becomes more urgent. So far as the acute effects of excessively foul air at high temperatures are concerned, such, for example, as appeared in the Black Hole of Calcutta, it is probable that they are due to substantially the same causes in man as in animals.

9. The proportion of increase of carbonic acid and of diminution of oxygen, which has been found to exist in badly ventilated churches, schools, theatres or barricks, is not sufficiently great to satisfactorily account for the discomfort which these conditions produce in many persons; and there is no evidence to show that such an amount of change in the normal proportion of these gases has any influence on the increase of disease and death rates which statistical evidence has shown to exist among persons living in crowded and unventilated rooms. The report of the commissioners appointed to inquire into the regulations affecting the sanitary condition of the British army, properly lays great stress upon the fact that in civilians at soldiers' ages in 24 large towns, the death rate per 1000 was 11.9, while in the foot guards it was 29.4, and in the infantry of the line, 17.9; and shows that this difference was mainly due to diseases of the lungs occurring in soldiers in crowded and unventilated barracks. These observations have since been repeatedly confirmed by statistics derived from other armies, from prisons, and from the death rates of persons engaged in different occupations, and in all cases tubercular diseases of the lungs and pneumonia are the diseases which are most prevalent among persons living and working in unventilated rooms, and unless such persons are of the Jewish race.

But consumption and penumonia are caused by specific bacteria, which, for the most part, gain access to the air passages by adhering to particles of dust which are inhaled, and it is probable that the greater liability to these diseases of persons living in crowded and unventilated rooms is, to a large extent, due to the special liability of such rooms to become infected with the germs of these diseases. It is by no means demonstrated as yet that the only deleterious effect which the air of crowded barracks or tenement house rooms, or of foul courts and narrow streets exerts upon the persons who breathe it, is due to the greater number of pathogenic micro-organisms in such localities. It is possible that such impure atmospheres may affect the vitality and the bactericidal powers of the cells and fluids of the upper air passages with which they come in contact, and may thus predispose to infections to potential causes of which are almost everywhere present, and especially in the upper air passages and in the alimentary canal of even the healthiest persons; but of this we have as yet no scientific evidence. It is very desirable that

researches should be made on this point.

10. The discomfort produced by crowded, ill-ventilated rooms in persons not accustomed to them is not due to the excess of carbonic acid, nor to bacteria, nor, in most cases to dusts of any kind. The two great causes of such discomfort, though not the only ones, are excessive temperature and unpleasant odors. Such rooms as those referred to are generally overheated; the bodies of the occupants, and, at night, the usual means of illumination, contributing to this result.

The results of this investigation, taken in conection with the results of other recent researches summarized in this report, indicate that some of the theories upon which modern systems of ventilation are based are either without foundation or doubtful, and that the problem of securing comfort and health in inhabited rooms requires the consideration of the best methods of preventing or disposing of dusts of various kinds, of properly regulating temperature and moisture, and of preventing the entrance of poisonous gases like carbonic oxide, derived from heating and lighting apparatus, rather than upon simply diluting the air to a certain standard of proportion of carbonic acid present. It would be very unwise to conclude, from the facts given in this report, that the standards of air supply for the ventilation of inhabited rooms, which standards are now generally accepted by sanitarians as the result of the work of Pettenkofer, De Chaumont and others, are much too large under any circumstances, or that the differences in health and vigor between those who spend the greater part of their lives in the open air of the country hills and those who live in the city slums do not depend in any way upon the differences between the atmospheres of the two localities, except as regards the number and character of micro-organisms.

The cause of the unpleasant, musty odor which is perceptible to most persons on passing from the outer air into a crowded, unventilated room is unkown. It may in part be due to volatile products of decomposition contained in expired air of persons having decayed teeth, foul mouths, or certain disorders of the digestive apparatus, and is due, in part, to volatile fatty acids produced from the excretions of the skin and from clothing soiled with such excretions. It may produce nausea, and other disagreeable sensations, in especially susceptible persons, but most men soon become accustomed to it and cease to notice it, as they will do with regard to the odor of a smoking car or of a soap factory after they have been for some time in the place. The direct and indirect effects of odors of various kinds upon the comfort, and, perhaps also, upon the health of men, are more considerable than would be indicated by any tests now known for determining the nature and quantity of the matters which give rise to them.

The remarks of Renk upon this point merit consideration.

Cases of fainting in crowded rooms usually occur in women, and are connected with defective respiratory action due to tight lacing or other causes.

Other causes of discomfort in rooms heated by furnaces or by steam are excessive dryness of the air and the presence of small quantities of carbonic oxide, of illuminating gas, and, possibly, of arsenic, derived from the coal used for heating.—Practical Medicine.

A SIMPLE EXPEDIENT FOR THE TREATMENT OF NOCTURNAL ENURESIS.

Stumpf, in the Munchener med. Wochenschrift for June 11, gives an account of a simple and apparently rational expedient which he has successfully adopted in the treatment of nocturnal enuresis, especially in older children. He was led to try it on the basis of the fact that the passage of even a few drops of urine through the sphincter vesicae excites the action of the detrusor to such an extent that the call to urinate becomes almost imperative. It is well known how difficult it is to restrain the act of urination after even a small

amount of urine has passed the sphincter vesicae and entered the urethra. His theory is that during sleep the sphincter of the bladder is apt to become relaxed, so that as the child lies horizontally in bed a little urine passes the sphincter and enters the deep urethra. The irritation of this urine causes at once strong reflex action of the detrusor, and the bladder is at once emptied in a full strong stream. It is a well-known fact that in nocturnal enuresis in children the urine does not leak away gradually, but the bladder is emptied at once, a point which is in support of this theory.

In order to prevent the passage of the urine into the urethra when the sphincter becomes relaxed during sleep a simple expedient is adopted, namely, the elevation of the pelvis, so that an accumulation of urine of ordinary amount in the bladder will gravitate back and distend the fundus, and not press against and tend to pass the sphincter. The elevation is secured by allowing the child only a single, small, flat pillow under the head, and placing one or two ordinary pillows under the thighs so that they lie at an angle of 130 to 150 degrees with the horizontal spine.

This simple expedient was entirely successful in curing two inveterate cases, one of a boy 9 years, and one of a girl 15 years old. It was then tried in 12 cases, and was uniformly successful. It was usually necessary to continue the treatment for three weeks, after which time the children were able to return to their former sleeping position without relapsing.

The writer has found it unnecessary to have recourse to the time-honored measures of limiting the amount of liquids, frequent waking up during the night, etc. The chief difficulty about the treatment is to see that the children maintain the position throughout the night. Small children particularly are apt to wriggle and toss about and have to be watched, put back in position, etc. The method is therefore especially adapted to older children, in whom the position can be more easily maintained.

This method is certainly so simple and apparently so reasonable as to merit extended trial, especially as the time-honored methods of treating this pernicious habit are in so many cases unsuccessful.

It will be rather interesting if the elevation of the pelvis, which Trendelenburg introduced into abdominal surgery, and which has so extended and facilitated work in that field, should also prove of service in preventing children from wetting the bed.—Boston Med. and Surg. Journ.

HEMATURIA OF GOUT.

Mabboux says: "An attack of renal gout consists anatomically in hyperemia, but there is not of necessity hematuria. The appearance of albumin in the urine or its sudden increase, whether or not it is coincident with articular pain, but accompaned with tenderness in the loins, is most frequently due to an attack of renal gout. These attacks are to be distinguished from renal colic due to calculi. Some attacks of hematuria occur without pain or pre-existing hematuria. Renal gout occurs in females quite as frequently as in males.

"Gouty hematuria is practically always renal in origin, as attacks of cystic gout resemble those of an ordinary cystitis, and a urethral gout possibly does not exist. In neither of the last instances are the blood and urine intimately mixed. Gouty renal colic may occur suddenly or after some days of lumbar pain. It often is the first expression of the diathesis in individuals of full habit without any genito-urinary disease; it is frequently accompanied by a chill; it is not influenced by walking or jolting; the pain is always bilateral, and the passage of the bloody urine is not painful. Its duration is variable; it may last from a few hours to several days. Sometimes there are a series of attacks lasting over several days. The urine frequently contains considerable renal epithelium in addition to the blood, and contains albumin in excess of the

amount of blood, which continues after the blood has disappeared. The pain is not frequently acute nor sharp, as it is in stone."—University Medical Magazine.

TREATMENT OF PROLAPSUS OF THE RECTUM BY GALVANISM.

Dr. R. B. Mitchell reports three cases of this troublesome affection which were relieved by the use of the continuous current. The intestine was first replaced within the sphincter (in one case this could only be accomplished by putting the patient under the influence of chloroform); one pole (he does not state which) was then introduced within the sphincter and the other over the sacral region and the current passed for five minutes. Maximum strength of the current used is not given. One to two treatments a week were given. The results were very slowly obtained The first case required four months of treatment before the bowel ceased to prolapse, but has since remained free from the trouble. In the second case—that of a woman with chronic mania, the protrusion being the size of a cricket-ball and intensely congested and bleeding—it required six months to bring about a like result. The third case was that of a man of 36 years, who had general paralysis with loss of strength and of co-ordination in the lower extremities and obstructed constipation. This patient required eight months of treatment. The great objection to the treatment is the length of time required, but it is possible that more frequent treatments would accomplish the result in a shorter time. He considers the treatment most suitable to cases in young children and the insane, in whom it would be difficult to keep the dressing in place after an operation.—Virginia Medical Monthly.

A CASE OF FETAL ASCITES.

Dr. F. B. Grimsdale writes: "Cases of this character are rare, and they are pathologically obscure. No adequate fetal lesion has been found to account for them. It has been necessary to call in some complicated pathological process, partly due to the mother and partly to the fetus, in order to explain the condition. In the present case the mother had suffered from albuminuria and general anasarca. After the delivery of the head with forceps it was found impossible to deliver the body. Examination showed a greatly distended abdomen. Delivery was effected after puncture of the abdomen and the liberation of a large amount of fluid. The whole body of the child was edematous and pitted on pressure. The surface of the trunk and limbs was covered with petechie. The abdominal wall was found to be one inch in thickness, due chiefly to watery adipose tissue. The lungs were collapsed, pale, and pink. There was no fluid in the pleura or pericardium. The liver and kidneys were, to the naked eye, normal. The heart and other organs were normal also. A definite lesion of the liver and kidneys was found upon microscopical examination, but its character is not stated. The author believes that various lesions may cause the condition. In this case he believes that the disease was primarily fetal, to which the maternal nephritis was secondary.—Archives of Pediatrics.

Miscellany.

REMEDY FOR INSECT STINGS.

A paint for the stings of insects, in which ammonia is kept in close and prolonged contact with the affected part, is described as follows:

Water of ammonia	1 drachm
Collodion	20 minims
Salicylic acid	2 grains

A few drops to be applied to each bite or sting.—Druggists' Circular.

TO EASE THE PAIN OF CORNS.

It is said that bathing the feet well in warm water and binding moist sodium bicarbonate over the corn at night will deprive it of its soreness before morning.—Lancet-Clinic.

RULES AS TO TIME OF RUPTURING THE AMNIOTIC SAC IN LABOR.

1. In multipara, rupture when os is fully dilated.

2. In primipara, delay until the small parts are also dilated.

3. In cases of face and breech presentation, delay in rupturing the sac is best.

4. Where the pelvis is small, and the fetus large, delay rupturing.

5. In premature labor, with dead fetus, rupture early.

6. Rupture the sac early when the membranes are unusually thick, tough and unyielding.

7. When speedy delivery is demanded, rupture early and dilate with the fingers.

8. Rupture the sac when an excessive amount of amniotic fluid retards labor.

9. When version is necessary, and can be accomplished by bimanual manipulation, perform this operation before rupturing.

10. Remember that a dry labor is always to be deprecated, hence do not rupture at all, unless for good reasons, and the case demands it.—Practitioner.

THE MEDICO LEGAL POINTS IN REGARD TO INFANTICIDE.

1. It is possible for woman to be unconsciously delivered, but not likely that she should go through the full term without being conscious of her pregnancy.

2. If the child was suddenly and unexpectedly born, and dropped accidentally on the floor or into a water closet vault, the cord would be found torn and broken off and untied, and not cut and tied in the ordinary manner.

3. In order that a child shall be live born within the meaning of the law, it must show some sign of life after being completely separated from the mother.

4. If a woman prepare no clothing for her child, and the child be found dead shortly after birth, this would be considered very strong evidence that the woman intended to destroy it.

5. It is possible that a child may be born living, yet so badly deformed as to render the prolongation of life, after the separation of the cord, impossible.

6. If the child has food partly digested in the stomach and intestines and the meconium all passed away, the child has lived at least twenty-four hours and has been fed.

7. If the septum ovalae of the heart is found closed, making a four-cavity heart, the child has lived as much as four days.

8. If the navel cord has withered and come away, and the navel healed completely, the child has lived as long as a week.

9. It is a fact worthy of remembrance that a child will stand a great amount of exposure, and that they have been found living for days after neglect under the most terrible circumstances.—Medical Summary.

VOMITING OF PREGNANCY.

A physician reports that he has not failed for many years to quickly check every case of vomiting of pregnancy, neuralgic toothache and pruritus pudendi of the pregnant state, simply by a single vesication over the fourth and fifth dorsal vertebrae.

Whenever sodium salicylate cannot be given in articular rheumatism, because of grave toxic symptoms, use hypodermic injections of pilocarpine, one-sixth grain.

ABORTIVE TREATMENT OF ERYSIPELAS.

Dr. W. H. Dewitt, Cincinnati, in the Lancet-Clinic, says: "I don't know that I am strictly warranted in using this term, for I doubt whether there is, or can be, such a thing as aborting erysipelas, and yet I do believe the treatment I have adopted for the past twelve months comes as near to it as possible. I have treated in all eight cases, the average duration being of a little less than four days. Five of the eight cases were facial, the remaining three of the lower extremities. The following formula was used in each individual case:

R—Ichthyol ..... dr. iiss
Collodion flex .....oz. iss—M.

This was directed to be applied

every three hours, always commencing the application about one inch beyond the line of demarcation between the healthy and inflamed skin. I believe this to be of the greatest importance. By adopting this method you will in nearly every case prevent the spread of the disease. The strength of the solution can be varied if thought best, but after several trials I have found the one suggested the more reliable. A great deal will also depend on the quality of the collodion. If good it will not crack and peel off in a few hours, but, on the contrary, will adhere firmly for some time, affording a perfect protection to the surface. In case it becomes loose and partially detached from the surface it should at once be removed and followed by a fresh application. At no time should the surface be left exposed longer than possible.

THE PRINCIPLES OF FEEDING.

BY DR. ERNEST FREUND.

According to Voit, the economy of a healthy man weighing about 150 pounds requires for its maintenance albumenoid substances, fats, and carbohydrates in about the following quantities:

Albuminoids	118 grams
Fat	56 grams
Carbohydrates	500 grams

In order to introduce a sufficient quantity of these substances into the organism for its support the breakfast should consist of: Coffee, 7 ounces, with sugar and roll; dinner of soup with 5 ounces of meat, 5 ounces of potatoes, 2 rolls, also 3 ounces of flour, and 5 drams of fat; an afternoon meal, the same as breakfast; evening meal, 3 1-2 ounces of meat, 2 ounces of rice and bread.

It is by no means necessary to take meat, as the nutritious constituents therein are represented in milk, cheese, leguminous substances and bread. It is impossible, however, to introduce a sufficient amount of albuminous substances by employing vegetables alone as articles of food. Mineral substances are also necessary, and the food will have to be prepared so that the necessary amount of inorganic substances is supplied the system.

Another important point is the absorption of the nutritive elements of the food-stuffs introduced. If in spite of a good diet the individual does not become fat, the causes are frequently to be found in changes in the intestines resulting in a smaller amount of absorption. In pathological processes, such as tuberculosis, the resorption is, of course, entirely different than in the normal state. The animal cell will try to reconstruct itself as long as it is possible to do so with a correct diet, and so long it will withstand deleterious influences from without.—Am. Med.-Surg. Bul.

DOCTORS' BILLS.

The Chicago Times publishes an account of an interview with a member of a firm in that city whose business consists entirely in the collection of doctors' bills. He was asked if the majority of patients paid their accounts, and said that they did not. From this it would be inferred that in Chicago over one-half of the patients failed to pay their doctors' fees—a statement that is extraordinary and improbable. We believe that in most American cities from 70 to 80 per cent. of the fees charged are paid and collected, and probably a larger percentage would be obtained if doctors rendered better service or managed the business side of their profession in a more rational manner.—N. Y. Med. Record.

THE NEW HEALTH COMMISSIONER FOR NEW YORK.

Dr. George B. Fowler has been appointed Health Commissioner of New York City in place of Dr. Cyrus Edson, resigned. Dr. Fowler is a native of Alabama, but came to this city during the war, and graduated from the College of Physicians and Surgeons in 1871. Dr. Fowler is a well-known and very popular member of the profession of this city, and his appointment will give pleasure to his very large circle of riends. Dr.

Edson's career as a member of the City Board of Health was most creditable to him, and he retires with a reputation of the highest kind as a sanitary and executive officer.

A REMEDY FOR BURNS.

Our exchanges often contain articles and items recommending different preparations for burns, each one generally closing with the old standby of lime water and oil, but the editor of the Charlotte Medical Journal asks, Why not use a remedy within the reach of everyone, and found on almost every pantry shelf? The editor says that at the very first possible moment grasp a handful of lard, such as is used for cooking purposes, and smear it over the burned surface. Then make a paste of flour and lard, as soft as can be handled, spread it about half an inch thick upon a cloth, and cover the injured parts. Let this paste remain until it begins to crumble, which can be ascertained by raising a corner of the cloth. Then make a fresh application, using great care in taking off the old plaster, that the surface of the skin be not broken.—Practical Medicine.

COCAINE INJECTIONS FOR ENLARGED PROSTATE.

For many years the difficulty of enlarged prostate has been to me one of considerable importance. Castration is probably the least desirable operation in operative surgery—not because of the difficulties or dangers present in the removal of the testicles, but because of the destruction of the virility of the individual concerned. While in search for a remedy short of absolute castration I devised a method that has so far succeeded in two cases; this is, to inject cocaine directly into the testicle twice per week for about two months. There is considerable absorption, and spermatozoa cease to be produced in about six weeks. The patient gets immediate relief from the distressing symptoms of prostatitis and enlargement; the gland gradually shrinks to its normal size, and the finale of the case is recovery, with the power of copulation but absolute cessation of the production of spermatozoa. Is not this better than castration?—Doctor S. E. McCully, in Medical Record.

CHEWING GUM IS NOT A FOOD.

We are greatly disappointed at the decison of a recent judge who declares that chewing gum is not an article of food, coming under the food and drug act. We had always supposed that gum was a food, and that great nourishment could be derived from its use. We can think of no other reason why old men and "middle-aged" women should ever use it, unless they have been suffering under the same delusion as ourselves. Young girls might use it because they must keep their jaws going, and this is an innocent way whereby they can work off this excess of masticatory enthusiasm. Now that we know we are not deriving genuine nourishment from Beeman's favorite preparation of pepsin, we shall, of course, throw no more money in the penny-slot machines!—Practical Medicine.

THE MICROBE FIEND.

O these doctors! Yes, these doctors
  Make me weary day by day
With their everlasting warnings
  That they swear we must obey.
Ah, microbia! microbia!
  Thou art a thing of fame:
But what crimes are now committed
  In thy inoffensive name!

With his microscope the health fiend,
  With most scientific care,
Goes a-gunning for bacteria
  And finds them everywhere.
Yes, he bags them in the horse car,
  In the foyer and the saloon:
The free lunches he calls "deadly
  As a corking day in June."

In the corner soda fountain,
  In the keg of foamy beer,
On the very nimble nickels
  That buy thirsty souls a cheer;
In our hats and shoes and pockets
  He finds snakes and bugs and things
That, when magnified, are monsters
  With ten thousand legs and wings.

O these doctors! Yes, these doctors!
  Is it then a fact most true
That, with all these warnings, men live
  Longer than they used to do?
Nay! Our ancestors lived longer
  In their ignorance sublime,
While these howling health fiends scare us
  Half to death before our time.